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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,051	07/31/2001	Wilhelmus Diepstraten	22-12-2-2	4248

7590 09/19/2007

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EXAMINER	
HARPER, KEVIN C	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
09/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/919,051	DIEPSTRATEN ET AL.	
	Examiner	Art Unit	
	Kevin Harper	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-5 and 7-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-5 and 7-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

In view of the appeal brief filed on June 4, 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER

Response to Arguments

Applicant's arguments with respect to claims 3 and 8 have been considered but are moot in view of the new ground(s) of rejection. The indicated allowability of these claims has been withdrawn in view of Schmitt et al. (US 2007/0135865)

1. Applicant's arguments, filed June 4, 2007 have been fully considered but they are not persuasive. Applicant argued that Trachewsky in view of Hasegawa does not disclose autocorrelation for network access control. However, in Trachewsky, the communication is for network access of terminals (figs. 1b and 1c; fig. 6; paras. 240-241) where data frames are

properly detected. In Hasegawa, autocorrelation provides proper reception (synchronization) of a communication (paras. 88-89). Therefore, Trachewsky in view of Hasegawa provides an autocorrelation that is used for network access control (i.e. detecting data frames). Applicant's own network access control is the proper reception of data frames (fig. 4, item 312; figs. 5-6; specification, page 12, lines 17-20; page 13, lines 28-30; page 14, lines 3-7) as similar to the invention disclosed by Trachewsky in view of Hasewaga.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 5, 7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trachewsky et al. (US 2001/0055311) in view of Hasegawa et al. (US 2001/0024454).

2. Regarding claims 5, 7 and 10-11, Trachewsky discloses a system (and method) for accessing a network from a station (fig. 1b) comprising a memory and processor to implement computer-readable code (para. 113, lines 1-5) configured to detect a first signal portion in a received data signal (fig. 6, item 610; para. 240, lines 1-3; para. 241, lines 1-4). A second signal portion (fig. 6, item 620) follows the first signal portion and uses a coding technique different from the coding technique of the first signal (fig. 6, item 610, 2 Mbaud QPSK vs. item 620 4 Mbaud QPSK, 8PSK, 16 QAM, etc.). The communication provides network access control in the reception of data (paras. 240-241).

3. However, Trachewsky does not disclose detecting the second signal by determining an auto-correlation between a first part and a third part of the signal. Hasegawa discloses detecting

a data frame by auto-correlation of a first and third portion of the data frame (para. 88, lines 1-7; note: cyclic prefix at head and tail of data). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to detect a second signal portion by auto-correlation in the invention of Trachewsky in order to properly synchronize the data reception (Hasegawa, para. 89).

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trachewsky in view of Hasegawa, as applied to claims 7 or 11 above, in further view of Williams et al. (US 5,815,488).

4. Regarding claims 4 and 9, Trachewsky in view of Hasegawa discloses an ADSL system (Trachewsky, para. 6, last two lines). However, Trachewsky in view of Hasegawa does not disclose OFDM. Williams discloses OFDM for use in an ADSL system (col. 2, lines 15-18). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to transmit OFDM symbols in the invention of Trachewsky in view of Hasegawa in order to provide bandwidth efficient and robust transmissions (Williams, col. 2, lines 31-40; col. 3, lines 17-37).

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trachewsky in view of Hasegawa, as applied to claims 7 or 11 above, in further view of Schmitt et al. (US 2007/0135865).

5. Regarding claims 3 and 8, Trachewsky in view of Hasegawa does not disclose filtering the second signal portion with two IIR biquad filters sampling the second signal at a frequency twice the second signal portion. However, Schmitt discloses sampling a signal using at least two IIR biquad filters (para. 16, lines 4-9). The sampled signal is filtered in order to remove noise

(para. 16, lines 4-9). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to sample the second signal using two IIR biquad filters in the invention of Trachewsky in view of Hasegawa. The rationale for the combination is a predictable removal of noise from the second signal portion by using IIR biquad filtering (see KSR Int'l Co. v. Teleflex Inc., 2007).

6. Further, the combination does not disclose sampling at twice the frequency of the second signal portion. However, the well-known Nyquist rate rule states that a signal is sampled at least at twice the frequency of the signal. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to sample a signal at least at twice the frequency of the signal in order to avoid filter aliasing as is known in the art.

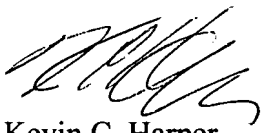
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at 571-272-2092. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin C. Harper

September 16, 2007